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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,978	02/02/2005	Takeyuki Kawase	2005_0060A	4243
52349 7590 02/07/2008 WENDEROTH, LIND & PONACK L.L.P. 2033 K. STREET, NW SUITE 800 WASHINGTON, DC 20006			EXAMINER ARBES, CARL J	
			ART UNIT 3729	PAPER NUMBER
			MAIL DATE 02/07/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,978	Applicant(s) KAWASE ET AL.	
	Examiner C. J. Arbes	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-45 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 26-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date <u>herein</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: ____.</p> |
|---|---|

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 26-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not understood or seen how for example, Applicants "determine that the component holder is defective when luminance of a non-cover region of the non-cover hold face ... is not smaller than a setting value, wherein the non-cover region corresponds to a region of the component hold face other than the region of said component hold face covered by the component (Cf. claims 26 and 30). It is not apparent and Applicants do not adequately disclose how a portion of the component hold face that is non-covered can be viewed whenever the hold face is holding a component thereon. Why isn't the component blocking any luminance from the component holder such that there can be no illumination of any portion of the component holder? Perhaps Applicants can clarify what is meant and also refer the Office to the relevant portions of the originally-filed Specification so that it can better understand the invention With respect to the 2 independent claims viz. 28 and 30) how can the component holder properly function if or when it is only partially covered by a component? It appears that the component holder would not properly function inasmuch as it could not achieve any vacuum and therefore would not be able to pick up or

transport any components. Again perhaps Applicants will explain why this concern does not exist by citing the pertinent portions of the originally written Specification or by other means.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-31, 35-37 and 42-44, assuming that the Specification is enabling, are further rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (Pat. No. 6,041,494) (of record); hereinafter Mimura et al.

Mimura et al teach a method of mounting an electronic part by automatically identifying a defective nozzle. An electronic component mounting means (7) is provided with a plurality of nozzles that act on electronic components (14) by suction. An imaging means (15) e.g. a CCD camera casts images of the electronic component held by a nozzle. A recognition controlling means (16) analyzes the image of the component held by the nozzle. The method includes taking an image of the tip surface of a nozzle (13) with the imaging means (15) and analyzing the image with the recognition controlling means (16) to inspect the condition of the tip surface of the nozzle (Cf. Abstract). Before starting the operation the tips of all the nozzles are recorded with the imaging means (Cf. Col 4). The brightness of each of the nozzles is recorded by means of the recognition controlling means. This procedure will provide data that defines a "normal" state. The brightness can be a brightness distribution in which the brightness is

allocated in each pixel of light. The brightness data can also be a distribution, maximum/minimum distribution and an area of a nozzle under a normal state before starting the component mounting. (Cf. Col 4) When the brightness value of a nozzle is compared with the original brightness value and the brightness falls below a predetermined value (which value is determined experimentally) e.g. the nozzle is chipped, the mounting means discontinues operation. It would have been obvious to illuminate a non-covered region of a nozzle's head, given the teaching of Mimura et al to illuminate the non-covered regions of the component's hold face because Mimura et al teaches using images of the tip surface to inspect the condition of this surface. Using images of the non-covered regions of the hold surfaces are held to have been equivalents of images of the tip surfaces. As applied to claim, 27, 35 and 42 it is held that a PHOSITA without undue skill would be able to divide the component's hold face into sections were at least one (1) section has a defect. As applied to Claims 28, 29, 34, 36, 37, 41, 43 and 44 it is held that the limitations recited therein are mere matters for design choice. That is there is no specific problem that is solved nor are these limitations for any particular purpose.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo, can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



O. J. Arbes
Primary Examiner
Art Unit 3729